## **James City Green Building Design Roundtable**

# Monday, June 1, 2009 Government Complex Building C Conference Room 4:00 p.m. to 6:00 p.m.

### **Roundtable Introductions**

#### **Private Sector**

Tim Mills, TAM Consultants
Richard Costello, AES Consulting Engineers
Robert Magoon, Jr., Magoon Associates
Jack Van Kniest, Van Kniest
Shereen Hughes, Former JCC Planning Commissioner
Tim Isom, Wal-Mart Distribution Center 6088
Matt Leffler, GVA Advantis
Susan Gaston, the Gaston Group
Tim Isom, Wal-Mart Distribution Center 6088
Kevin Wills, McDonough Bolyard Peck (MBP)
Suzy Cheely, Busch Gardens
Bill Strack, Henderson, Inc.

#### **Public Sector**

James Kennedy, JCC Board of Supervisor
John McGlennon, JCC Board of Supervisor
Rich Krapf, JCC Planning Commission
Robert Becker, W-JCC Schools
Steven Hicks, JCC Development Management
Rick Hanson, JCC Office of Housing & Community Development
Michael Vergakis, JCSA
Cheryl Waldren, JCC Development Management
Scott Thomas, JCC Environmental Division
Tom Coghill, JCC Code Compliance
Steven Yarvorsky, JCC Economic Development
Ellen Cook – JCC Development Management
Scott Whyte – JCC Development Management
Bernie Farmer – JCC General Services

#### **General Discussion**

Steven welcomed everyone to the meeting and asked the team about the minutes, was there any comments and/or corrections to be made.

Cheryl Waldren updated the committee about the JCC Green Building Design Roundtable Committee being posted on the County website. The committee is located in the section of "In the Spotlight" and she explained to the members that the information from the meetings is now posted on the <a href="www.jccegov.com">www.jccegov.com</a> website. She also handed out to staff paperwork which Andy Cronan has given to committee's members the week before and copies of the subcommittees groups were handled out to staff who did not receive them.

Bob Magoon introduced our guest speaker for the evening, Sandra Leibowitz Earley, AIA, LEED AP Principal, with Sustainable Design Consulting, located in Richmond, Virginia. Sandra has worked on over 70 green building projects and 60 of those are LEED related projects. She is also a board member of Earthcraft Virginia. She did a presentation called "*JCC Costs and Benefits of Green Buildings*". After her presentation it was open for questions and answers.

She opened the discussion about LEED commissioning.

Bob Becker asked about having the mechanical engineer inspect the system and if you cannot convince the owner the system works then one should find another engineer that can design for optimal use. He asked are the testing methods in the specifications?

Ms. Earley mentioned the distinction is to make sure the system is working and there are other examples such as the inspections of different kinds that are also required. Ms. Earley also mentioned the element of the third party review and the commissioning as being accountable.

The commission validates the design by the engineer. Traditionally, however, it's not part of the process. Commissioning validates what the engineer does.

The ultimate validation is operations and maintenance, not what is modeled but what is beginning used. Begin to look at utilities expenses to reveal the difference and look at the new registration.

One of the questions asked, was commissioning during the process what if they do find the HVAC system not working correctly, who is responsible?

Ms. Earley responded back the responsibility would usually be the mechanical contractor and it depends on what the problem is. The contractor and the mechanical contractor are very equally involved in the commission process because the commission authority is overseeing the process and overseeing the completion of the contract by the adjusting values. It would depend, however, if it was designed wrong, then that is another matter.

Mr. Becker states if it was built wrong based on the specs then you're looking at the mechanical engineer. If it built to the specs then you do not need a third party. It should work to design and if it's built to the design and specs, then it's the owner's responsibility for the cost.

Ms. Earley responded back there can be conflicts in what the plans and specs are saying on emissions. The point is not everything may get caught and that is what the commission

process if for to help identify those opportunities and for tweaking those designs that could implement improvements in the field.

Ms. Hughes stated that this process of third party review is not unusual in other professions, such as accounting, for example. She asked Ms. Earley to discuss the levels of certification.

Ms. Earley stated that commissioning is done according to different certified levels. The levels are the bronze, silver and platinum. In what has been done in 2009 is change the point version, the point version for all of LEED.

Ms. Hughes asked what about site design. How much site design is involved?

Ms. Earley responded back it is significant. Both Earthcraft and LEED are similar and are better by the national standards. She also mentioned using local plants and irrigation to receive points.

Mr. McGlennon asked is there a hierarchy of achievement?

Ms. Early mentioned a 2003 study and that is what everyone is using but it's a reliable reference. She also mentioned that she is looking at the numbers and are the numbers widening or narrowing. She also responded back make sure you have everything in order, prerequisites in erosion and sediment control is one of them. Certain prerequisites must be done to all. There have been some costs to receive full credits, compared to \$30,000 for enhance commissioning.

Mr. McGlennon stated that the operations and maintenance will be reduced and there is savings involved.

Ms. Earley replied if there is energy savings involved, yes. She mentioned a 2003 study also references energy savings and reduced operations and maintenance.

Mr. Thomas asked if Ms. Earley could explain about LEED neighborhoods.

Ms. Earley response was that it was very different from any LEED building program, and that it was developed in concert with the Natural Resources Defense Council and with the Congress of New Urbanism so new urbanists principals are throughout LEED and there are three pilot projects. They range from silver to gold level.

Mr. Farmer asked what do they do?

Ms. Earley replied they are totally different. They have a lot of requirements for example they look at density, look at livability with the perspective of walk ability in a community. It includes public transportation access and measurements. Another aspect is access to servicesdoes the neighborhood have everything they need, and where are the services located within that boundary. There is also a section on green technology. A pilot version is an experiment; it

didn't require green building in a neighborhood, you could have still received LEED certification without having the green building technology.

Mr. Hanson stated it would seem to be infeasible in some circumstances and asked about LEED certified residential development instead of areas that are in cities.

Ms. Earley replied this is where LEED for homes comes in. LEED for homes had been previously from buildings three stories and below and they are trying to produce a hybrid that addresses the midrise four to six story market. You can do LEED on any scale of a home from SFH to a high rise.

Mr. Hanson then asked you could not have Earthcraft certified buildings.

Ms. Earley has had them do exceptions on five stories or more, which Earthcraft was being used for.

Someone had asked were a lot of the studies based on high dollar per square foot building?

Ms. Earley mentioned the study from 2003; there are a lot of green buildings that are affordable housing and green communities. She mentioned the Green Building Act which requires a different rating system than Earthcraft but it is similar to Earthcraft.

Mr. Coghill asked if she could comment on the International Code Council Green Standard 700.

Ms. Earley replied back she had not heard of any movement in that code. However, ASHRAE Standard 189 is a green building standard which is intended to take the best of LEED with some IESNA criteria etc. It is written to be dropped in to building codes. It is still being written into a process. It may come out in 2010.

Mr. Magoon mentioned there can be additional cost for not having the right personnel or experts to do the job.

Ms. Earley asked who in the room is LEED accredited? There are only three. There are new requirements for LEED certification and you would have to actually do projects in order to pass the exam. LEED also offers a two tier program. The AIA have to also have courses in dealing with sustainable design.

The meeting was then adjourned.